Overview

Models

NVIDIA Quadro K3100M 4GB Graphics E5Z76AA

Introduction

The NVIDIA Quadro® K3100M graphics board is a graphics processing unit (GPU) module designed using the MXM™ version 3.1 Type B specification. This graphics module provides high level graphics capabilities for demanding professional product design/development applications and workflows. This module is also well suited for digital media workflows.

Performance and Features

The NVIDIA Quadro K3100M offers:

- Large fast 4 GB GDDR5 memory
- Lastest NVIDIA Kepler GPU architecture
- 768 CUDA cores
- Extensive ISV application certifications

Compatibility

Supported on HP Z1 G2 workstation.

Service and Support

The NVIDIA Quadro K3100M has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.

Technical Specifications

Form Factor	MXM v3.1 Type B (82mm x 105mm)
Graphics Controller	N15E-Q1, 705MHz core clock 768 CUDA cores
Bus Type	PCI Express Gen 3 x16 (part of MXM v3.1 connector)
Memory	4GB GDDR5 256 bit wide interface 3200MHz, 102.4 GB/s
Connectors	One MXM v3.1 connector (285-pin)
Maximum Resolution	2 x 3840x2160 @ 60Hz digital displays In Z1 G2 application: - Internal Display: 2560x1440 - External Display via DP connector: 2560x1600 - External Display via optional Thunderbolt module: Two 3840x2160
RAMDAC	Not Applicable
Image Quality Features	Each color component can be processed at up to 32-bit floating point precision and displayed at up to 12-bit precision. Advanced FXAA and TXAA antialiasing. 16K Texture and Render Processing. MPEG-2 HD and WMV HD video playback (1920x1080p). H.264 hardware decode acceleration. Nvidia Scalable Geometry Engine. AES-128 CTR/CBC/ECB decryption modes supported. Nvidia 3D Vision Pro
Shading Architecture	Shader Model 5.0 support
Supported Graphics APIs	Full IEEE 764-2008 32-bit DirectX 11.1 Shader Model 5.0 OpenGL 4.3 Compute API support for NVIDIA CUDA C, CUDA C++, DirectCompute 5.0, OpenCL, Java, Python and Fortran
Available Graphics Drivers	Windows 7 64-bit Windows 8.1 64-bit SUSE Linux Enterprise Desktop 11 64-bit Red Hat Enterprise Linux 6 Workstation 64-bit See www.hp.com/go/support for HP supported NVIDIA graphics drivers

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